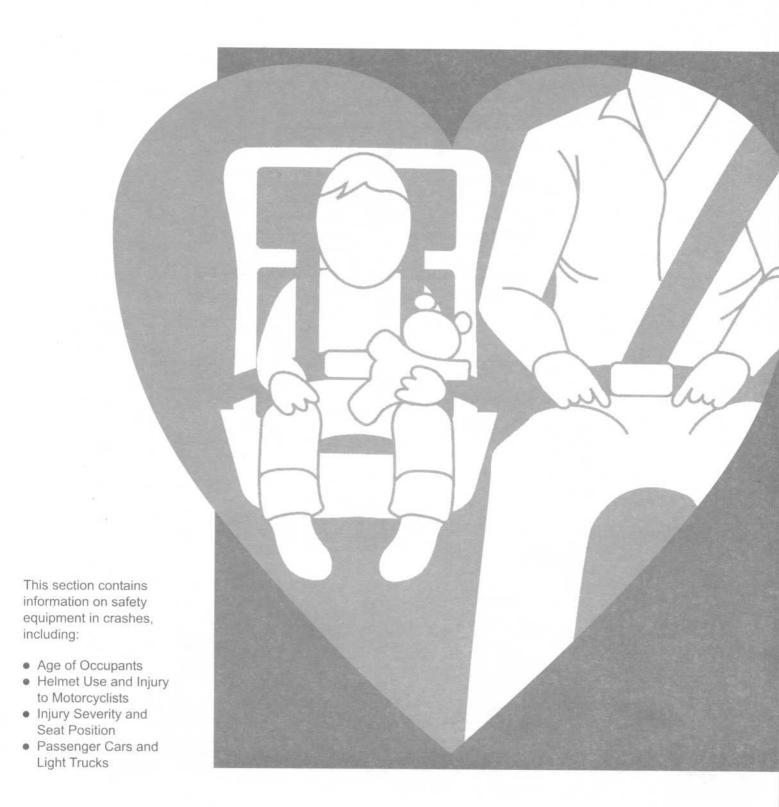
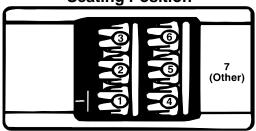
VII. SAFETY EQUIPMENT



2001 Safety Equipment Use in Passenger Cars by Injury Severity and Seat Position

					Seat Po	osition	by Safet	y Equi	pment U	lse						
	1		2		3		4		5		6		7		тот	AL
Injury Severity	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Not Injured	99,626	5,449	723	80	25,122	1,820	6,850	531	2,811	253	8,317	630	1,531	89	144,980	8,852
Incapacitating	1,505	855	17	15	429	339	50	55	15	26	85	89	10	6	2,111	1,385
Nonincapacitating	6,174	1,996	48	29	1,712	860	297	128	82	50	359	185	39	14	8,711	3,262
Possible	16,783	2,042	139	27	4,941	911	822	181	294	91	1,146	226	178	37	24,303	3,515
Killed	128	177	1	0	38	47	6	8	3	5	2	11	2	0	180	248
TOTAL	124,216	10,519	928	151	32,242	3,977	8,025	903	3,205	425	9,909	1,141	1,760	146	180,285	17,262





2001 Safety Equipment Use in Passenger Cars in Crashes by Age of Occupant

Age of Occupant	Shoulder & Lap Belt	Lap Belt Only	Shoulder Belt Only	Child Safety Seat	None	TOTAL
1-2	433	81	15	2,231	81	2,841
3	433	91	7	837	39	1,407
4	730	158	11	482	55	1,436
5-9	4,587	688	41	377	312	6,005
10-14	5,770	552	38	0	682	7,042
15	2,527	173	10	0	468	3,178
16	8,083	209	65	0	1,051	9,408
17	8,273	191	60	0	1,272	9,796
18	7,442	140	71	0	1,293	8,946
19	6,382	90	57	0	1,011	7,540
20	5,534	85	52	0	918	6,589
21	5,153	53	35	0	885	6,126
22	4,523	50	41	0	686	5,300
23	4,045	40	21	0	539	4,645
24	3,563	52	28	0	468	4,111
25-34	27,751	234	203	0	2,849	31,037
35-44	26,514	207	141	0	1,939	28,801
45-54	20,548	134	96	0	1,169	21,947
55-64	11,001	75	52	0	489	11,617
65-74	7,861	52	43	0	329	8,285
75-84	6,161	36	25	0	336	6,558
85 & over	1,476	13	7	0	103	1,599
Unknown	1,542	96	21	1,386	288	3,333
TOTAL	170,332	3,500	1,140	5,313	17,262	197,547

These reports count only those occupants for whom safety equipment use and seat location were recorded on the accident report form. Caution: Safety equipment use for many occupants was self-reported. Therefore, these figures may overstate actual use of safety equipment. Yes = used safety belts or child safety seat. No = no safety equipment used.

2001 Safety Equipment Use in Light Trucks by Injury Severity and Seat Position

					Seat Po	sition	by Safet	y Equi	pment U	se						
	1		2		3		4		5		6		7		тот	AL
Injury Severity	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Not Injured	20,947	1,743	456	117	4,278	410	440	33	234	17	597	44	67	10	27,019	2,374
Incapacitating	217	222	5	17	56	83	3	4	1	5	8	5	5	0	295	336
Nonincapacitating	1,015	487	26	29	235	199	16	13	7	6	23	12	6	1	1,328	747
Possible	2,193	405	50	25	597	146	48	7	23	5	56	9	3	0	2,970	597
Killed	16	75	0	3	1	11	0	0	0	0	0	2	0	0	17	91
TOTAL	24,388	2,932	537	191	5,167	849	507	57	265	33	684	72	81	11	31,629	4,145

This report counts only those occupants for whom safety equipment use and seat location were recorded on the accident report form. Caution: Safety equipment use for many occupants was self-reported. Therefore, these figures may overstate actual use of safety equipment. Yes = used safety belts or child safety seat. No = no safety equipment used.

2001 Safety Equipment Use in Light Trucks in Crashes by Age of Occupant

Age of Occupant	Shoulder & Lap Belt	Lap Belt Only	Shoulder Belt Only	Child Safety Seat	None	TOTAL
1-2	39	6	1	175	9	230
3	47	14	2	58	6	127
4	94	14	2	31	7	148
5-9	496	91	4	19	53	663
10-14	638	94	4	0	94	830
15	276	16	2	0	82	376
16	849	31	6	0	175	1,061
17	910	14	3	0	202	1,129
18	910	32	6	0	218	1,166
19	891	14	5	0	203	1,113
20	921	13	8	0	164	1,106
21	904	18	8	0	209	1,139
22	764	15	5	0	172	956
23	697	12	6	0	150	865
24	677	9	7	0	113	806
25-34	5,962	65	45	0	816	6,888
35-44	6,468	49	32	0	697	7,246
45-54	4,551	35	27	0	396	5,009
55-64	2,377	11	12	0	157	2,557
65-74	1,254	10	7	0	115	1,386
75-84	459	7	5	0	64	535
85 & over	70	0	0	0	14	84
Unknown	217	3	4	101	29	354
TOTAL	30,471	573	201	384	4,145	35,774

This report counts only those occupants for whom safety equipment use and seat location were recorded on the accident report form. Caution: Safety equipment use for many occupants was self-reported. Therefore, these figures may overstate actual use of safety equipment. Yes = used safety belts or child safety seat. No = no safety equipment used.

2001 Passenger Car and Light Truck Occupants for Whom Airbag Deployed in Crash -Manner of Collision by Injury Severity

			Injury Severity			
Manner of Collision	Killed	Incapacitating	Non-incapacitating	Possible	Not Injured	Total
Angle	38	392	1,369	1,899	2,517	6,215
No collision with vehicle in transit	69	302	930	883	1,851	4,035
Rear end	4	92	430	678	1,733	2,937
Head on	35	150	267	283	274	1,009
Side swipe opposite	4	30	95	103	171	403
Side swipe same	0	19	55	75	182	331
Rear to rear	0	1	5	14	13	33
Unknown	6	14	50	89	286	445
TOTAL	156	1,000	3,201	4,024	7,027	15,408

This table does not take into account whether or not the person was using a safety belt at the time of the crash.

2001 Safety Equipment Use on Motorcycles by Injury Severity and Seat Position

				Seat Pos	ition by Sa	fety Equip	oment Use			
			Driver				P	assenge	er	
Injury Severity	Helmet Worn	Eye Protection	None	Unknown	Total	Helmet Worn	Eye Protection	None	Unknown	Total
Not Injured	117	137	53	89	396	15	17	15	10	57
Incapacitating	163	254	122	33	572	17	41	25	7	90
Nonincapacitating	289	353	200	60	902	41	53	35	2	131
Possible	143	131	97	38	409	14	18	11	4	47
Killed	12	32	16	2	62	2	2	3	1	8
TOTAL	724	907	488	222	2,341	89	131	89	24	333

				Seat Pos	ition by Sa	fety Equip	oment Use			
			Side Car					TOTAL		
Injury Severity	Helmet Worn	Eye Protection	None	Unknown	Total	Helmet Worn	Eye Protection	None	Unknown	Total
Not Injured	0	1	0	0	1	132	155	68	99	454
Incapacitating	0	0	0	0	0	180	295	147	40	662
Nonincapacitating	0	1	0	0	1	330	407	235	62	1,034
Possible	1	0	1	0	2	158	149	109	42	458
Killed	0	0	0	0	0	14	34	19	3	70
TOTAL	1	2	1	0	4	814	1,040	578	246	2,678

This report counts only those motorcyclists for whom seat location was recorded on the accident report form.

2001 Motorcyclists Injured by Age and Role by Safety Equipment Use

			Driver				Pas	Passenger				Sig	Side Car				ľ	Total		
Age	Helmet	Eye Protect	None	Ş	Total	Helmet	Eye Protect	None	ş	Total	Helmet Worn	Eye Protect	None	ş	Total	Helmet Worn	Eye Protect	None	ş	Total
Under 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-9	0	0	0	0	0	က	_	0	0	4	0	0	0	0	0	က	_	0	0	4
10-14	0	0	0	2	2	9	0	_	_	8	0	0	0	0	0	9	0	~	က	10
15	_	0	0	0	_	2	0	0	0	2	0	0	0	0	0	ဇ	0	0	0	က
16	ဇ	0	_	4	80	0	0	_	_	2	0	0	0	0	0	ဧ	0	2	2	10
17	9	_	_	_	6	0	4	4	0	8	0	0	0	0	0	9	2	2	_	17
18	26	7	13	_	47	-	2	_	_	2	0	0	0	0	0	27	6	41	2	52
19	30	24	=	80	73	7	_	_	0	4	0	0	0	0	0	32	25	12	80	77
20	27	19	13	2	64	0	7	က	_	9	0	0	0	0	0	27	21	16	9	70
21	22	19	15	2	61	7	9	0	2	10	0	0	0	0	0	24	25	15	7	71
22	15	22	18	9	28	0	7	2	_	2	0	0	0	0	0	15	24	20	4	63
23	17	20	13	_	51	7	-	0	0	3	0	0	0	0	0	19	21	13	_	54
24	20	19	=	Э	53	7	9	_	0	6	0	0	0	0	0	22	25	12	Э	62
25-34	119	183	82	30	417	7	29	16	_	48	0	_	0	0	_	121	213	101	31	466
35-44	106	213	116	28	463	17	8	19	2	72	0	0	0	0	0	123	247	135	30	535
45-54	132	168	06	32	422	26	15	16	2	29	0	0	_	0	_	158	183	107	34	482
55-64	52	38	21	7	118	2	8	4	0	17	0	0	0	0	0	25	46	25	7	135
65-74	1	4	6	0	24	7	0	_	_	4	0	0	0	0	0	13	4	10	_	28
75-84	80	_	_	0	10	0	0	0	0	0	0	0	0	0	0	8	~	_	0	10
85 and over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	-	-	2	0	1	1	0	2	1	0	0	0	1	1	1	2	1	2
TOTAL	269	738	419	131	1,883	72	112	71	13	268	1	_	-	0	3	899	851	491	144	2,154

្ឋា Eye Protect = eye protection Unk = unknown ក្នា Note: This report counts only those motorcyclists for whom seat location was known.

2001 Motorcyclists Killed by Age and Role by Safety Equipment Use and Gender

				Driver							Passenger	nger								Total	<u>=</u>					ı
	Helmet Worn		Eye Protection		No Protection		Unknown	Helmet Worn	net rn	Eye Protection	tion	No Protection		Unknown		Helmet Worn	Worn	Eye	Eye Protection	tion	No P	No Protection	io	Unkr	Unknown	l
Age	Σ	ш	Σ H	Σ	F	Σ	ш	Σ	ш	Σ	ш	Σ	ш	Σ H	≥	ш	Ţ	Σ	ш	Tot	Σ	ш	Tot	Σ	 	Tot
10-14	0	0	0 0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0 0	<u> </u>	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0 0	<u> </u>	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_	0	_	0	0	0
18	0	0	1	<u> </u>	0	0	0	0	0	0	0	0	0	0 0	0	0	0	_	0	_	0	0	0	0	0	0
19	~	0	0 0	<u> </u>	0	0	0	0	0	0	0	0	0	0 0		0	_	0	0	0	0	0	0	0	0	0
20	0	0	0	<u> </u>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	_	0	1	_	0	0	0	0	0	0	0	0	0	0 0	_	0	_	_	0	_	0	0	0	0	0	0
22	0	0	3 0	_	0	0	0	0	0	0	0	0	_	0	0	0	0	က	0	က	-	_	7	0	_	_
23	0	0	1	_	0	0	0	0	0	0	0	0	0	0 0	0	0	0	~	0	~	0	0	0	0	0	0
24	_	0	0 0	_	0	0	0	0	0	0	0	0	0	0 0		0	_	0	0	0	0	0	0	0	0	0
25-34	_	0	5 0	4	0	0	0	0	0	0	7	0	0	0 0	_	0	_	2	7	7	4	0	4	0	0	0
35-44	_	_	10 0	9	0	0	0	0	_	0	0	0	7	0 0	_	7	က	10	0	10	9	7	80	0	0	0
45-54	7	0	9	7	0	7	0	0	_	0	0	0	0	0 0	7	_	က	6	_	10	7	0	7	7	0	7
55-64	7	0	1	7	0	0	0	0	0	0	0	0	0	0 0	7	0	7	~	0	~	7	0	7	0	0	0
65-74	7	0	0 0	<u> </u>	0	0	0	0	0	0	0	0	0	0 0	7	0	8	0	0	0	0	0	0	0	0	0
75-84	0	0	0 0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11	-	31 1	16	0 9	2	0	0	2	0	2	0	3	0 1	1	3	14	31	3	34	16	3	19	2	_	

M = male F = female Tot = total

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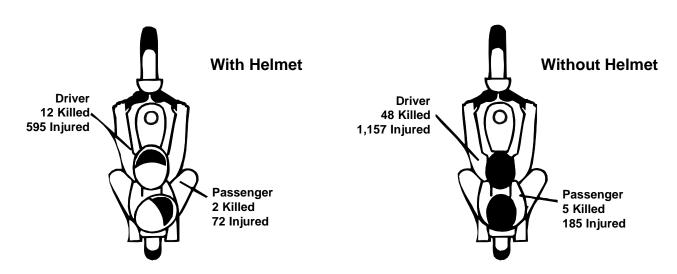
2001 Occupants and Injury Severity by Seating Position and Safety Equipment Use

Passenger Cars and Light Trucks

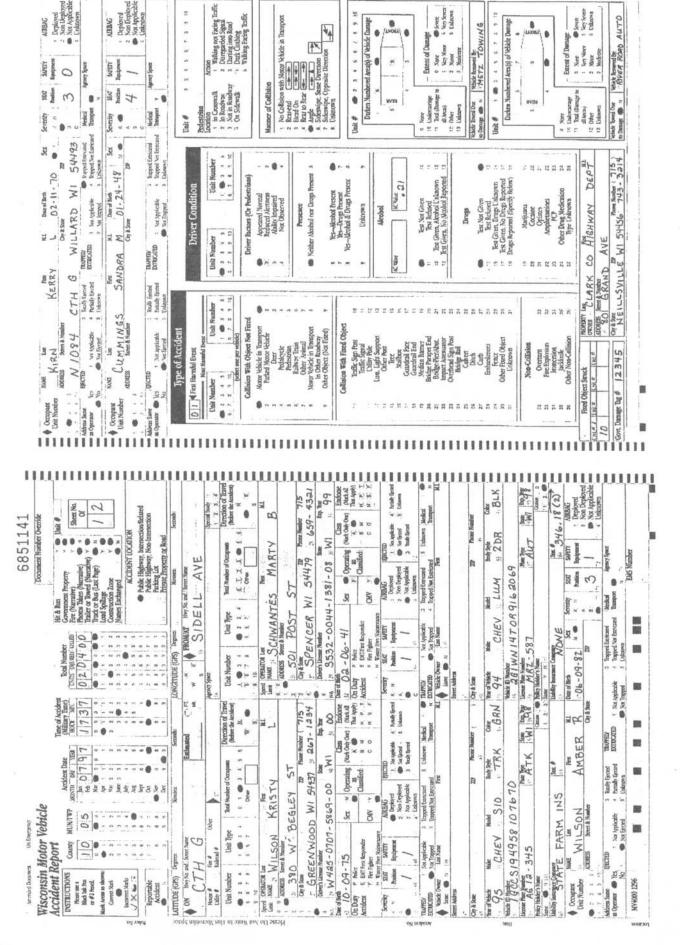
Without Safety Equipment With Safety Equipment Seat 2 Seat 2 1 Killed 3 Killed Driver Driver 285 Injured 142 Injured 144 Killed 252 Killed Seat 3 27,887 Injured 6,007 Injured Seat 3 39 Killed 58 Killed 7,970 Injured 2,538 Injured Seat 5 Seat 5 3 Killed 5 Killed 422 Injured 183 Injured Seat 4 Seat 4 Seat 6 Seat 6 6 Killed 8 Killed 2 Killed 13 Killed 1,236 Injured 388 Injured 1,677 Injured 526 Injured Seat 7 Seat 7 2 Killed 0 Killed 241 Injured 58 Injured

These numbers count only those occupants for whom safety equipment use and seat location were reported on the accident report form. Seat 7 includes miscellaneous seat positions such as third row seats in cars and vans. Note that use of safety equipment is often self-reported on the crash report form and may not reflect actual use.

Motorcycles



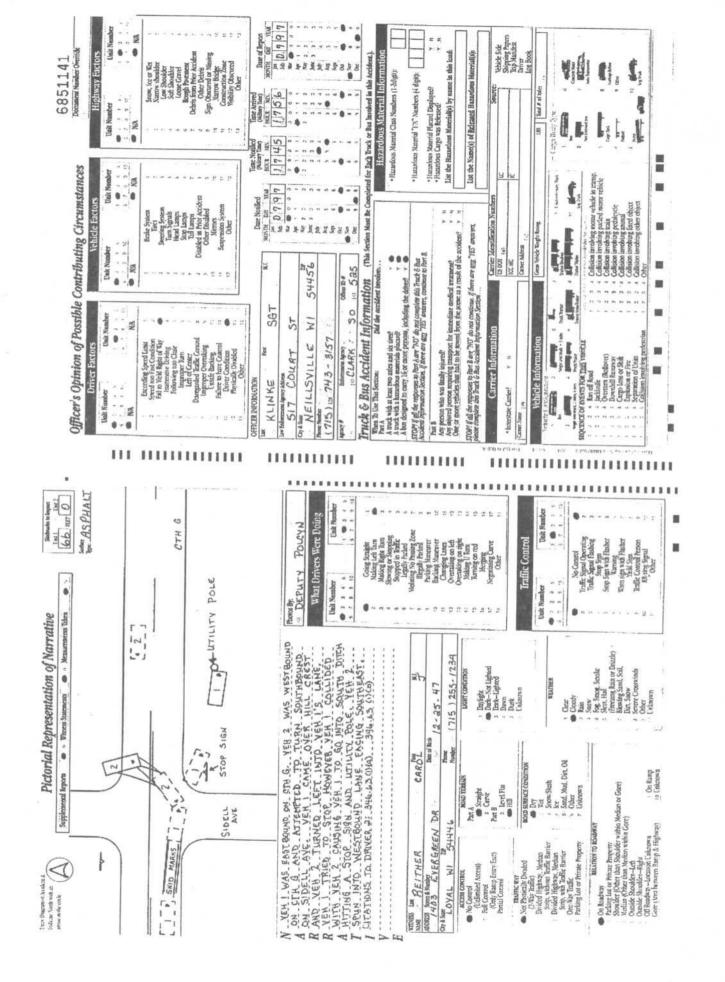
These numbers include only those motorcyclists whose safety equipment use was reported on the crash report form. Use of safety equipment is often self-reported and may not reflect actual use. *Without Helmet* includes those cases where safety equipment was *Eye Protection Only*.



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Glossary of Terms

ALCOHOL-RELATED CRASH - Either a driver, bicyclist or pedestrian is listed on a police or coroner report as drinking alcohol before the crash.

ALCOHOL-RELATED FATALITY - A person who died within 30 days as a result of a traffic crash involving alcohol.

ALCOHOL CONCENTRATION (AC) TEST - A test to determine the level of alcohol in a person's blood-stream. In Wisconsin, the limit of .10 equals an alcohol level of 1 part per thousand.

COLLISION CRASH - A motor vehicle crash other than an overturning incident in which the first harmful event is a collision of a road vehicle in transport with another motor vehicle, other property, or pedestrians.

CRASH - An occurrence that originates or terminates on a traffic way, that involves at least one motor vehicle in transport and results in injury or death to any person, or damage to any property. This includes acts by the operators of motor vehicles that contribute to the cause of a crash regardless of physical contact and, for the purpose of ch. 344, WI Stats, (Safety Responsibility Program), includes intentional acts.

CRASH RATE - The number of crashes per 100 million vehicle miles traveled.

CRASH SEVERITY

Fatal Crash - A motor vehicle traffic crash in which one or more persons were killed.

Injury Crash - A motor vehicle traffic crash involving one or more persons who were physically harmed or who complained of physical harm but were not killed.

Property Damage Crash - A motor vehicle traffic crash involving property damage and no injury or death.

CRASH TYPE -The category that best describes the general type of collision which was the first harmful event, that is, the first occurrence of injury or damage.

DRIVER/OPERATOR - The occupant of a vehicle who is in actual physical control of a vehicle in transit or, for an out-of-control vehicle, the occupant who was in control before control was lost.

FATALITY RATE - The number of persons killed per 100 million vehicle miles traveled.

FIRE-RELATED CRASH - Combustion, explosion or burning of a unit related to a motor vehicle crash regardless of whether a collision occurs.

FIRST HARMFUL EVENT - The first occurrence of injury or property damage in a motor vehicle crash.

HAZARDOUS MATERIAL SPILLAGE - A load spilled from a cargo-carrying vehicle that is considered dangerous or involves risk.

INJURY SEVERITY

Fatal Injury (K Injury) - An injury received in a traffic crash that results in death within thirty (30) days of the crash.

Incapacitating Injury (A Injury) - An injury, other than fatal, that prevents walking, driving, or performing other activities that were performed before the crash.

Nonincapacitating Injury (B Injury) - An injury, other than fatal or incapacitating, that is evident at the scene. Evidence includes known symptoms.

Possible Injury (C Injury) - Any injury that is not evident at the scene but that is claimed by the individual or suspected by the law enforcement officer.

INTERSECTION - An area that contains a crossing or connection of two or more roadways not classified as driveway access and within the prolongation of the lateral curb lines. If no curb exists, it is the area within the extension of the lateral boundary lines of the roadway of two joined traffic ways.

INTERSECTION-RELATED - A crash resulting from an activity, behavior, or traffic control that affects a unit's movement in relation to an intersection, whether or not the point of origin or first harmful event occurred within the intersection.

MOTOR VEHICLE - A self-propelled vehicle, including trailers and semitrailers designed for use with such vehicles. This does not include farm tractors, implements of husbandry, road machinery, well drillers or snowmobiles which are classified as equipment. (See UNIT TYPE.)

MOTOR VEHICLE IN TRANSPORT - A motor vehicle in operation (i.e. not parked).

MOTOR VEHICLE IN TRANSPORT IN OTHER ROADWAY - A collision of a vehicle with another vehicle after crossing a separation area between two parallel roadways (e.g. vehicle left freeway and hit another vehicle on a frontage road).

NON-COLLISION CRASH - Any motor vehicle crash other than a collision crash, including explosion of any part of the motor vehicle, fire starting in the motor vehicle, overturning, immersion, vehicle struck by a flying object, etc.

OCCUPANT - Any person who is in or upon a vehicle, including the driver, passenger, and persons riding on the outside of the vehicle.

PASSENGER - Any occupant of a vehicle who is not the driver.

POINT OF ORIGIN - The location point where a crash begins from an activity affecting a unit's movement.

REPORTABLE CRASH - A crash resulting in injury or death of any person, any damage to government-owned non-vehicle property to an apparent extent of \$200 or more, or total damage to property owned by any one person to an apparent extent of \$1,000 or more. (This definition went into effect 1/1/96. See page 2.)

ROLE - The function of the person at the time of the crash, such as: driver, owner, passenger, injured property owner, bicyclist, or pedestrian.

RURAL CRASH - A crash that occurred in an unincorporated area or in an incorporated area with a population under 5,000.

SPEED-RELATED CRASH - A crash where at least one driver involved in the crash received a citation for speeding, or was listed on the accident report as "exceeding speed limit" or "speed too fast/conditions."

TRAFFIC WAY - Premises open to the public as a matter of right or custom for use of their motor vehicles whether the premises are publicly or privately owned.

UNIT TYPE - A way of identifying a road vehicle or a pedestrian involved in a crash. There are seven general categories of unit type:

Auto - Passenger car, police car, ambulance, etc.

Truck - Utility truck, straight truck, fire truck, truck tractor (not attached, semi attached, double bottom), motor home, etc.

Motorcycle - Motorcycle, moped, motor scooter, etc.

Bus - School bus, passenger bus, etc.

Equipment - Farm tractor and other self-propelled farm equipment, other working machines (e.g., forklift, grader, end loader, etc.), railroad train, snow plow, snowmobile, all-terrain vehicle, and miscellaneous.

Bicycle - Every non-motorized device propelled by the feet acting upon the pedals including unicycles, bicycles, tricycles, etc.

Pedestrian - Any person afoot (or using assistive devices). This includes someone getting on or off a vehicle.

URBAN CRASH - A crash that occurred within the limits of an incorporated area having a population of 5,000 or more.

VEHICLE MILES - The estimated total number of annual miles traveled by motor vehicles on Wisconsin highways and roadways.

VEHICLE TYPE - A way of further classifying a unit type by vehicle use and registration.

WORK ZONE - The area between the first advance warning sign and the point beyond the utility or construction work area where traffic is no longer affected.

WORK ZONE-RELATED - A crash that results from an activity, behavior, or traffic control related to a work zone but not necessarily within it.

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Most of the data in this book came from the DOT/DMV Traffic Accident Database, which compiles data recorded on the MV4000 Wisconsin Motor Vehicle Accident Report by state and local law enforcement agencies.

